

U.S. Appln. No. 10/004,980

Page 3

### REMARKS/ARGUMENTS

This is Applicants' response to the office action of March 4, 2004 in which all the claims in the case 16-20 were rejected and the office action made final. Applicants respectfully request reconsideration in view of the following remarks.

Claim 19 was objected to under 37 CFR 1.75(c) as being an improper dependent form for failing to further limit the subject matter of a previous claim. Claim 19 has been cancelled rendering the objection moot. Withdrawal of the objection is respectfully requested.

Claims 16-20 had been rejected under 35 USC 102(b) as being anticipated by Bloomfield US Patent No. 3,982,962. The Examiner has taken the position that a hydrocarbon fuel becomes mixed with water or steam in the Rankine cycle loop. However, the Examiner's reading of the reference is in error. The only place Bloomfield teaches that steam and a hydrocarbon fuel should be mixed is in the line 66, which leads to the steam reformer 18. The Examiner's attention is respectfully directed to Bloomfield, column 5, lines 39-46, which states: "The superheated steam leaves the heat exchanger 72 and is delivered to a valve 96 via a conduit 98. The valve 96 permits the amount of steam necessary for the steam-reforming reactor 18 to pass into the conduit 66 whereupon it mixes with unprocessed fuel at 64 as here above explained. The remainder of the superheated steam is delivered into the turbine 40 via conduit 100." As such, only superheated steam is delivered into the turbine 40 and thus back into the Rankine cycle loop. The Examiner's attention is also further directed to Bloomfield, column 5, line 28-32, which states in part, "Water is delivered into pump 90 via conduit 92 and is delivered into thermal heat exchange relationship with the stack via conduit 94..." As such, Bloomfield teaches that only water is delivered to the stack 12.

Applicants' independent Claim 20 calls for an organic cooling fluid to be pumped into a heat exchanger of a fuel cell. Bloomfield actually teaches a way from Applicants'

U.S. Appln. No. 10/004,980  
Page 4


claimed invention by teaching that water should be pumped from pump 90 via line 94 into a heat exchanger of the fuel cell.

The Examiner's attention is also respectfully directed to Bloomfield, column 6, lines 9-17 and Figure 2. Even where Bloomfield suggests using a Rankine cycle with a fluid other than water, such as a refrigerant, the Rankine cycle loop does not include a fuel cell. As shown in Fig. 2 of Bloomfield a separate Rankine loop is provided that does not include the fuel cell. A separate steam loop is provide wherein water is pump into a heat exchanger in the fuel cell. Again, Bloomfield teaches away from Applicants' claimed invention.

Claims 16-19 have been cancelled. Unamended claim 20 is believed to be patentable over the prior art. New claims 21-22 further limit the organic cooling fluid of claim 20 .

In view of the above amendments and remarks, Applicants respectfully request reconsideration and allowance of Claims 20-22 now in the case.

Respectfully submitted,



Cary W. Brooks, Attorney  
Reg. No. 33361  
313-665-4717